



WESTMINSTER

**Department of Community Development  
Building Division**

4800 West 92<sup>nd</sup> Avenue Westminster, Colorado 80031  
For Information call (303) 658-2075 Fax (303) 706-3922

**SOLAR PHOTOVOLTAIC SYSTEMS**  
**PERMIT SUBMITTAL REQUIREMENTS**

**General Requirements**

- Provide permit application completely filled out. Provide **THREE** copies of all documents other than application – only one copy of the application is required.
- Provide a site plan that locates all equipment on the drawing
- Address on application and reflect on the roof layout drawing whether there are any plumbing, mechanical, or building vents that will have to be relocated or affected (not allowed to cover low profile attic vents, dryer vents, or bathroom exhaust vents – either these items will have to be relocated or the panels do not get installed at those locations)
- Specify if the system is a stand alone or interactive (grid-tied) system
- Roof mounted systems must be on permanent standoffs and provide the following:
  - Type of roof structure, i.e., roof trusses or rafters
  - Method of locating roof framing members
  - Provide mounting details. All permanent standoffs shall be mounted to structural members, mounted to deck, and properly flashed to accommodate re-roofing without removal of standoffs.
  - Indicate in “Description of work” field on application or on the drawings how many layers of roofing will exist once the system is installed.

**Wiring Requirements**

Provide a three-line diagram that includes the following information:

- Conductor size and insulation types
- Conductor material, i.e., copper, aluminum
- Series and parallel configuration of the module connections
- Main over current device ratings
- Existing and new panel busbar amperage ratings

Provide a schematic drawing that includes the following:

- The location of all modules, inverters, disconnects, and service equipment
- The location of all batteries
- The location and connection of all grounding electrode conductors
- The clearances around all equipment noted above

Conduit or cable type & size, i.e., nonmetallic, EMT, direct burial cable etc.

Provide all calculations from modules to inverter and inverter to point of connection

Provide all applicable warning and marking labels for AC and DC disconnects as required



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**Equipment Requirements**

Provide the following equipment information:

- Module short circuit current ratings
- Module open circuit voltage ratings
- Module series fuse ratings
- Inverter maximum output current rating
- Inverter maximum over current protection – output /input per manufacturer
- Inverter U.L. File number, listings and remaining specifications
- Provide all associated documentation/ cut sheets, and installation instructions on equipment, i.e., inverters, disconnects, modules, charge controllers, over current devices, etc.

**Fire Department Requirements**

Per the fire departments amendments to the 2009 IFC, PV solar systems must meet the following requirements:

- 611.1 Roof Clearances for Installations
  - Panels shall not be placed closer than 2’0” to the ridge of any roof
  - Panels shall be placed no closer than 2’0” to the head wall at the top of any roof slope
  - Panels shall be placed no closer than 18” from any roof valley.
  - Additional roof access may be required based on unique site conditions as determined by the fire Department.
- 611.2 Direct Current (DC) Wiring
  - Direct current (DC) conduit, wiring, and raceways shall be located below the solar array or a minimum of 24” below the roof sheathing.
- 611.3 Labeling
  - For residential applications, a label stating “CAUTION, SOLAR PHOTO VOLTAIC SYSTEM ON PREMISES” shall be placed at or within the main electrical service disconnect.

**Applicants are encouraged to review Department of Finance Sales Tax Division  
TAX COMPLIANCE GUIDE – CONSTRUCTION –  
Topic 370 SOLAR SYSTEMS.**